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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,902	01/18/2002	Wolfgang A. Renner	1700.0190004/BJD/SJE	7792

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STERNE, KESSLER, GOLDSTEIN & FOX PLLC
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[REDACTED]
EXAMINER

MOSHER, MARY

ART UNIT	PAPER NUMBER
1648	11

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/050,902	Applicant(s) Renner et al
	Examiner Mosher	Art Unit 1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE one MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-218 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims 1-218 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner. See "Sequence Rules" in Office Action.
- 10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

- 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

- 4) Interview Summary (PTO-413) Paper No(s). _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Art Unit: 1648

DETAILED ACTION

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-189 and 194-218, drawn to core/attachment/antigen combination, classified in class 530, subclass 350 for example. If this group is elected, election of species is further required, see below.
- II. Claims 190-193, drawn to mutant Q β phage protein, classified in class 435, subclass 235.1 for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination can use other core structures such as a phage R17 structure, see as evidence claim 6. The subcombination has separate utility such as forming a capsid without bound antigen, see as evidence claim 190.

Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Art Unit: 1648

The claims of Group I are drawn to combinations of core, attachment, and antigen. Each of these claims is generic to a plurality of disclosed patentably distinct species of core, attachment, and/or antigen comprising at least the species listed below. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for core, a single disclosed species for attachment, and a single disclosed species for antigen, even though this requirement is traversed. The species are seen as patentably distinct, because the lists of species include such a diversity of structurally and functionally different materials that prior art teaching one species would not render obvious all of the other species. Each species of core, each species of attachment, and each species of antigen requires divergent search.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Species of core are listed in the following claims:

- claim 6, 94, 123, 142, 171 (12 species)
- claim 7 (13 species)
- claim 18 (5 species). If one of these species is elected, the same species in claims 190-193 will also be examined.
- claim 90, 103, 138 (5 species)
- Claim 92, 121, 140 (16 species)
- claim 112 (18 species)
- Claim 180 (1 species)

Art Unit: 1648

Species of attachment are listed in the following claims:

claim 22, 144 (9 species)
claim 33, 86, 132, 154 (16 species)

Species of antigen are listed in the following claims:

claim 35, 133, 134 (26 species)
claim 42 (4 species)
claim 56 (3 species)
claim 63 (three species)
claim 64 (three species)
claim 70 (two species)
claim 77 (6 species)
claim 156 (20 species)
claim 157 (5 species)
claim 159 (2 species)
Claim 161 (8 species)

Applicant is advised that a reply to this requirement must include an identification of the species that are elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 1648

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Sequence Rules

Applicant should review the specification and claims for compliance with the Sequence Rules, particularly 37 CFR 1.821(d) which requires reference to a SEQ ID number wherever a sequence is discussed in the specification and claims. It is noted that numerous sequences appear without a SEQ ID number, for example in Figures 1 and 2, specification pages 49, 57, 213 and claims 42, 49, 56, 159. Applicant is required to review the entire disclosure for compliance with the sequence rules, to amend the specification, and to submit a replacement Sequence Listing if all of the disclosed sequences are not already included in the Listing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is (703) 308-2926. The examiner can normally be reached on Monday - Thursday and alternate Fridays from 6:30 AM to 4:00 PM.

Art Unit: 1648

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached on (703) 308-4027. The fax phone number for this Group is now (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

April 1, 2003

Mary Mosher

**MARY E. MOSHER
PRIMARY EXAMINER
GROUP 1600**

160)